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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,809	03/28/2006	Hiroshi Kawato	287247US0PCT	9361

22850 7590 08/28/2008

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EXAMINER	
BUTTNER, DAVID J	

ART UNIT	PAPER NUMBER
1796	

NOTIFICATION DATE	DELIVERY MODE
08/28/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/573,809	KAWATO ET AL.	
	Examiner	Art Unit	
	David Buttner	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 3/28/06.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

The lined out reference on the 1449 form was not provided. Only an abstract of the publication (not the publication being cited) was provided.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 5-7 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Calkins '288.

Calkins exemplifies (table 2) blends of BPA based polycarbonate with 0.05% 3,4-epoxy cyclohexylmehtyl 3,4-epoxy cyclohexane carboxylate and 0.02% or 0.06% triphenylphosphine. The Tg of bisphenol A based polycarbonate is well known to be above 140^0C. A slab of this material can be considered "an optical part" as any flat transparent material could be used as a window pane.

Claims 1 and 4-7 rejected under 35 U.S.C. 103(a) as being unpatentable over Calkins '288 in combination with Miyauchi '479.

Calkins exemplifies (table 2) blends of BPA based polycarbonate with 0.05% 3,4-epoxy cyclohexylmehtyl 3,4-epoxy cyclohexane carboxylate and 0.02% or 0.06% triphenylphosphine. Calkins does not suggest the inclusion of fatty acid ester lubricants.

Miyauchi (abstract) discloses fatty acid esters suitable for use in triphenylphosphine stabilized polycarbonates. Miyauchi considers these fatty acid esters as lubricants (col 4 line 35-36) and mold release agents (col 8 line 36-37) and recognizes they provide additional benefits (col 7 line 27). It would have been obvious to add a fatty acid ester to the Calkins composition for the expected benefits.

Alternatively, it would have been obvious to add the epoxy compound of Calkins to Miyauchi's PC, triphenylphosphine, fatty acid ester composition. Calkins (col 3 line 3-15) teaches the inclusion of the epoxy maintains melt viscosity and therefore the properties of the original polycarbonate.

Claims 1-3 and 5-7 rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroshi 2003/0173546 in view of Nising CA2404480 or Dick '955.

Hiroshi exemplifies blends of BPA based polycarbonate, 0.1% polymethylmethacrylate, 0.05% alicyclic epoxide and 0.02% tris (2,4-di-t-butylphenyl)phosphite antioxidant. 0.05-1 parts of polysiloxane may also be present (paragraph 49). Hiroshi teaches phosphorous antioxidants in general (paragraph 42), but does not name phosphines.

Stabilizers such as triphenylphoshine and phosphites such as tris (2,4-di-t-butylphenyl)phosphite (Nising page 14 line 18-19; Dick col 2 line 45-49) are known to functional similarly in polycarbonates. It would have been obvious to substitute triphenylphosphine for the phosphites of Hiroshi to obtain an equivalent final product (MPEP 2144.06).

Claims 1-3 and 5-7 rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/16498 in view of Nising CA2404480 or Dick '955.

WO 02/16498 is believed to equivalent to Hiroshi 2003/0173546.

The WO reference exemplifies blends of BPA based polycarbonate, 0.1% polymethylmethacrylate, 0.05% alicyclic epoxide and 0.02% tris (2,4-di-t-butylphenyl)phosphite antioxidant. 0.05-1 parts of polysiloxane may also be present (paragraph 49). The WO reference teaches phosphorous antioxidants in general, but does not name phosphines.

Stabilizers such as triphenylphoshine and phosphites such as tris (2,4-di-t-butylphenyl)phosphite (Nising page 14 line 18-19; Dick col 2 line 45-49) are known to functional similarly in polycarbonates. It would have been obvious to substitute triphenylphosphine for the phosphites of the WO reference to obtain an equivalent final product (MPEP 2144.06).

If multiple independent claims are submitted such that the scope of (A) and/or (C) is narrower for claim 1 than for claims requiring additional components (eg claims 2-4), a restriction requirement will be necessitated.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is 571-272-1084. The examiner can normally be reached on weekdays from 10 to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Buttner

8/22/08

/David Buttner/

Primary Examiner, Art Unit 1796